IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Jagadish Bandhole; Sekaran Nanja; Shan Balasubramaniam
Assignee:	VERITAS Operating Corporation
Title:	CROSS-SPECTRUM APPLICATION MODEL FOR DYNAMIC COMPUTING ENVIRONMENTS IN SOFTWARE LIFECYCLE
Serial No.:	10/044,290 Filing Date: January 11, 2002
Examiner:	Andre R. Fowlkes Group Art Unit: 2192
Docket No.:	VRT0078US

Austin, Texas
October 13, 2005

MAIL STOP AF
COMMISSIONER FOR PATENTS
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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir:

Applicants hereby request review of the outstanding rejections, set forth in the Final Office Action (FOA) mailed July 13, 2006, in the above-identified application. This Request is being filed concurrently with a Notice of Appeal. No amendments are being filed with this request. This review is requested for the reasons set forth in the Remarks section below.

REMARKS

Claims 1-21 are pending in the application. Claims 1-21 stand rejected.

Rejection of Claims under 35 U.S.C. § 103

Claims 1-21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over White (U.S. Patent No. 5,896,530) in view of McNally, et al. (U.S. Patent No. 6,259,448). Applicants respectfully submit that the cited art neither teaches nor suggests these claims, for the reasons set forth in more detail below.

The cited art fails to teach or suggest "a dynamic computing environment" (DCE). Applicants' claims emphasize the dynamic nature of the computing environment, which

allows the DCE to be repeatedly reconfigured (e.g., the DCE is configured twice in claim 1). Such a dynamic computing environment is clearly not taught or suggested in the cited art.

On p. 2 of FOA, the Examiner cites the following statement in White: "This invention relates generally to computer software architectures, and more particularly to a system and method enabling a plurality of computers and associated computer resources, some or all of which may be heterogeneous in configuration, to cooperatively process a variety of applications such that the user sees the same image of the application no matter where the application is actually executing." White, col. 1, lines 12-17. The Examiner then repeatedly equates "heterogeneous in configuration" with the "dynamic computing environment" (DCE) of the claims. FOA, p. 2 *et al.*

Applicants note that "heterogeneous" is clearly not the same as "dynamic." Furthermore, nothing about a group of devices that is "heterogeneous in configuration" suggests any need for the use or presence of a dynamic computing environment. The group of devices can be heterogeneous in configuration while being part of a static environment, and there is no need for a dynamic computing device to have or maintain a group of devices having heterogeneous configuration. Thus, a "heterogeneous" group of computers and associated computer resources, as described in the cited portion of White, clearly neither teaches nor suggests the claim term "dynamic computing environment."

In the respect to arguments section of the Final Office Action mailed July 5, 2005, the Examiner also cites col. 7, lines 51-52 of White as teaching a DCE. However, the cited section of White simply states: "Information packets destined for devices may be modified in order to conform with the device characteristics which are present at the time of dispositioning, thus accomodating [sic] dynamic changes to device configurations." This passage only teaches that a given device's configuration can dynamically change; it neither teaches nor suggests a "dynamic computing environment" that has the capabilities and characteristics of the DCE described in claim 1. Accordingly, the cited section of White does not describe a "dynamic computing environment" as recited in claim 1.

No other portion of the cited art, alone or in combination with White, teaches or suggests this feature of claim 1. For example, the cited portions of McNally, considered alone and in combination with the cited portions of White, do not teach or suggest a dynamic computing environment that includes the components (e.g., computing devices, subnets, and

storage devices) or functionality (e.g., deallocating one or more subnets) of the dynamic computing environment recited in claim 1.

The cited art also fails to teach or suggest "configuring the dynamic computing environment for a first phase in the plurality of phases," wherein the phases are "phases in a software lifecycle." The Examiner simply equates "applications" with "phases." FOA, p. 3. However, an application is quite clearly not a phase of any kind, let alone a phase in a software lifecycle. The cited portions of McNally also fail to teach or suggest configuring a DCE for specific phases of a software lifecycle.

Additionally, the cited art fails to teach or suggest "wherein said configuring comprises allocating a first subnet, allocating a first computing device coupled to the first subnet, allocating a first storage device coupled to the first computing device, and storing a first set of instructions on the first storage device," as recited in claim 1. The Examiner relies upon col. 3, lines 40-44 of White to teach these features. The cited portion of White recites:

> In view of the above problems associated with the related art, it is an object of the present invention to provide a system and method of computer software architecture for enabling a plurality of computers, and associated computer resources, some or all of which may be heterogenous [sic] in configuration, to cooperatively process applications, including applications built from a single application source base.

Applicants note that simply enabling a plurality of computers to cooperatively process applications, as described in the cited portion of White, clearly does not teach or suggest the reconfigurability that the claimed invention's functionality provides, such as "allocating a first subnet," "allocating a first computing device," and "allocating a first storage device." In fact, the cited portion of White does not mention subnets or storage devices at all. Accordingly, the cited portion of White, both alone and in combination with the other cited art, clearly does not teach or suggest these features of claim 1.

As noted by the Examiner on pp. 4-5 of FOA, White does not disclose several features of claim 1, including:

> "deallocating one or more of the first subnet, the first computing device, and the first storage device; configuring the dynamic computing environment for a second phase in the plurality of phases, wherein said configuring comprises allocating a second subnet subsequent to said deallocating the first subnet, allocating a second computing device coupled to the second subnet subsequent to said deallocating the first computing device, allocating a second storage device coupled to the second computing device subsequent to said deallocating the first storage device, and storing a second set of instructions

> on the second storage device subsequent to said deallocating the first storage device."

The Examiner relies upon col. 8, line 3 through col. 9, line 10 of McNally to teach "deallocating one or more of the first subnet, the first computing device, and the first storage device." FOA, p. 5. The cited passage of McNally recites:

> The configuration and method begins at step 60 by having an administrator open up a resource modeling desktop (e.g., a deployment task window on the GUI). At step 62, the administrator selects a resource model to be deployed or implements a new model (for example, through the build process illustrated below). Typically, step 62 requires the administrator to open up a dialog box and select an existing resource model. At step 63, a test is performed to determine whether the target hosts are represented by an existing domain. As used herein, a "domain" represents a set of target nodes for deployment). If the outcome of the test at step 63 is negative, the routine branches to step 64 to create a new domain and assign the target host to that domain. The routine then continues at step 65, which step is also reached by a positive outcome to the test at step 63. At step 65, the routine continued with the user applying a GUI drag-and-drop to associate the model with the domain.

Although the Examiner cites this passage as disclosing "deallocating," there is no mention in this passage of deallocating any of the claimed elements (a subnet, a computing device or a storage device). Instead, this paragraph merely describes selecting nodes to which to send a resource model.

Further, the Examiner equates McNally's term "configuration" with "deallocating one or more subnets." FOA, p.5. Applicants respectfully submit that there is no indication or statement within the context of McNally's disclosure that the term "configuration" is intended to mean "deallocating one or more subnets." For at least these reasons, Applicants respectfully submit that McNally fails to disclose "deallocating one or more subnets."

In the response to arguments (FOA, p. 18), the Examiner states that McNally does disclose deallocating and cites col. 2, lines 56-63 of McNally. The Examiner then sets forth a quotation, allegedly from the cited portion of McNally, that ends with the sentence: "When the resource model icon is dropped onto the selected distribution icon, the resource model is deployed in the network (and vice versa)." FOA, p. 18, emphasis added. However, the actual text of McNally does not include the underlined parenthetical statement "and vice versa" that is included within quotations in the Final Office Action. Accordingly, McNally itself only discloses deploying resource models through a drag-and drop protocol. The cited portions of McNally do not teach or suggest anything about the act of deallocating in general, nor do

those portions suggest the specific act of deallocating the specific components (subnets, computing devices, or storage devices) recited in claim 1. As noted above, White also fails to teach or suggest this feature. Thus, the cited art also fails to teach or suggest this feature of claim 1.

The Examiner further equates the "resource model" of McNally with the "subnet" of claim 1. FOA, p. 5. Applicants note that the resource model is a software model that is made up of various properties (e.g., current state, state rules, controls, and mapping rules). McNally's resource model is clearly not a "subnet" as the term is used in claim 1. For example, unlike the "first subnet" of claim 1, the "resource model" of McNally cannot be "coupled to" a computing device. Thus, the resource model neither teaches nor suggests the "first subnet." Similarly, deploying the resource model using a drag-and-drop protocol does not teach or suggest "deallocating" "the first subnet," as recited in claim 1.

Thus, as set forth above, the cited art fails to teach or suggest several features of claim 1, including "a dynamic computing environment;" "configuring the dynamic computing environment for a first phase in the plurality of phases," where the phases are "phases in a software lifecycle;" "wherein said configuring comprises allocating a first subnet, allocating a first computing device coupled to the first subnet, allocating a first storage device coupled to the first computing device, and storing a first set of instructions on the first storage device;" and "deallocating one or more of the first subnet, the first computing device, and the first storage device." For at least these reasons, claim 1 is patentable over the cited art, as are claims 2-16. Claims 17-21 are patentable over the cited art for similar reasons.

CONCLUSION

Applicants assert that the application is in condition for allowance and respectfully request that a finding withdrawing the final rejection of the claims be issued.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450, on October 13, 2006.

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10/13/2006

Date of Signature

Respectfully submitted,

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